

NOTES ON THE TRIGLID FISHES OF THE GENUS  
*PRIONOTUS*

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Despite the appearance of two recent revisions (Ginsburg, 1950 and Teague, 1951), the sea-robins of the genus *Prionotus* still offer a good many problems to the systematist. Although both of the above works are carefully done and very useful contributions, it is regrettable that each author took advantage of only a small percentage of the material then available in American museum and university collections.

In attempting to identify the sea-robins in the University of Florida collection, a considerable amount of difficulty was experienced. It was found helpful to examine supplementary material from other institutions, particularly the relatively large collection at the Natural History Museum of Stanford University.

As has been pointed out in a recent paper (Caldwell and Briggs, 1956), an initial result of this investigation was a significant extension of the known range for *Prionotus punctatus* (Bloch) together with a clarification of its synonymy. This species is now considered to be very widespread extending from the Georgia coast to Argentina (38° S. Latitude) and to the northern Gulf of Mexico.

In the Western Atlantic there are three species which form a natural group identified by the presence of a large, stemmed, supraocular cirrus and a pectoral fin ray formula of 14 + 3. These are *P. grisescens* Teague, *P. murieli* Mowbray, and *P. ophryas* Jordan and Swain. They are fully described by Teague (1951) and may be readily separated by using his key. Due to an unfortunate lack of material, only one of the three was treated by Ginsburg (1950, p. 507).

Of the three recognized species in the aforementioned group, two are rare. *P. murieli* is known only from the holotype taken on the Cay Sal Bank between Florida and Cuba. *P. grisescens* is known from the holotype and four paratypes all taken near Tortugas, Florida and a single specimen from off the Florida east coast captured by the Belgian training ship "Mercator". The Uni-

versity of Florida collection (U.F. 7088) has an apparently typical specimen of *P. griseus* which was taken by a trawler 30 miles northeast of Loggerhead Key. However, another specimen (U.F. 1567) collected by the U. S. Fish and Wildlife Service Vessel "Oregon" from the northeastern Gulf of Mexico ( $30^{\circ}00'$  N.,  $87^{\circ}08'$  W. at 23 fathoms) shows some interesting variations. It differs from both the written description of the species and the specimen at hand by having no squamation on the chest, no nasal cirrus, and the median ridge of the first dorsal spine more strongly serrated.



Figure 1. *Prionotus griseus* Teague. Drawn from a specimen of 153 mm. standard length (U. F. 1567).

Ordinarily the above differences might be deemed sufficient for the recognition of a new species. In this case, however, the nearest relative (*P. griseus*) has been described from only six specimens, five of them collected in a single location, so that comparatively little is known about the variation within the species. Furthermore, since the form in question is represented only by a single specimen (153 mm. in standard length) it was thought best to simply refer to the differences and to provide a figure (Figure 1) in the hope that the matter may be cleared up at some future date when more material is available.

The most interesting find in the Stanford collection was a single specimen from the coast of Costa Rica which is so sharply differentiated from all other prionotids that there is no question of its being a representative of an undescribed species.

## PRIONOTUS TEAGUEI, new species

## Figure 2

DIAGNOSIS: A small *Prionotus* with the upper free pectoral ray noticeably elongate, 2.0 in standard length, and more or less lanceolate in shape. Dorsal X, 12; anal 11; pectoral 13 + 3.

DESCRIPTION: Body of medium depth and width, depth 4.3 and width 4.9; head of medium length, 2.3; all in standard length. Snout 2.3; maxillary 2.4; eye 3.9; interorbital space very narrow, 8.0; nape short, 7.1; nape width 4.8; all in head length. Pectoral fin of medium length, 1.7; pelvic fin medium in length, 3.4; both in standard length. First dorsal spine length, 2.7; second dorsal ray 2.2; preopercular spine 6.3; opercular spine 4.8; humeral spine 7.1; all in head length. Lateral line pores 51 + 5. Seven rows of scales above the lateral line and 17 below. Gill rakers on the first arch 0 + 7.

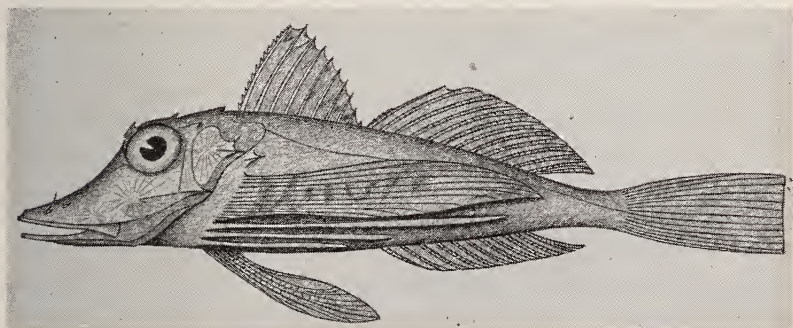


Figure 2. *Prionotus teaguei*, new species. Drawn from the holotype 62.5 mm. standard length (S. U. 46380).

Rostral, preorbital, and suborbital spines absent. Supplementary preopercular spine also absent (only a serrate ridge with terminal spinules extends almost to end of preopercular spine). Preocular spine strong, elevated; postocular strong, depressed. Sphenotic spine absent but pterotic well developed; parietal strong, elevated, and occupying a whole ridge. Nuchal spine strong, slightly elevated; postfrontal groove well defined and at the front of a depressed area. Eyes prominent but orbital region not abruptly elevated. Rostral plates not produced, bluntly serrulate, and broadly rounded from a dorsal view. Interorbital space concave. Opercular flap

scaled. Caudal fin truncate. Median ridge on first dorsal spine evenly serrate; second and third dorsal spines smooth. Median ridge of first dorsal ray serrated on the proximal quarter. Nasal flap long and well developed.

**COLORATION:** In alcohol, aside from the first dorsal and pectoral fins, there is virtually no pigmentation remaining, probably a result of 18 years of preservation. The upper third of the pectoral shows an even light brown color, the ray being considerably lighter than the membrane between. As is shown in Figure 2, there are two vertical, dark brown bars toward the base of the fin and some shorter markings further out. The first dorsal has only some faint brown markings on the distal end between the spines. The rest of the body is a uniform light yellow and reveals no other noticeable coloration.

**RELATIONSHIP:** When the key to the species of *Prionotus* presented by Teague (1951, p. 5) is utilized this new species will be identified as *P. albirostris* Jordan and Bollman and, indeed, this form is its closest relative. However, there are numerous differences, the size of the first free pectoral ray being the most conspicuous. The length of this ray was found to occur 3.4 times in the standard length of a specimen of *P. albirostris* comparable in size to the type of the new species. This may be contrasted to the condition in *P. teaguei* where the ray fitted but 2.0 times in the standard length. Other differences of importance are found in the head length, interorbital space, nape length, pelvic fin length, first dorsal spine, second dorsal ray, preopercular spine, opercular spine, and humeral spine. There are also no definitely developed rakers on the upper limb of the first gill arch of *P. teaguei* and the sphenotic spine is absent.

**HOLOTYPE:** Stanford University number 46380; 62.5 mm. in standard length taken by the Eastern Pacific *Zaca* (1937-38) Expedition of the New York Zoological Society at 9°19'32" N., 84°29'30" W., 14 miles southeast of Judas Point, Costa Rica, on March 1, 1938.

**REMARKS:** All counts and measurements given in this paper have been taken in accordance with the methods listed by Teague (1951). Also, his descriptive procedure has been followed so that the account of this species will be directly comparable to his representations of the other members of the genus.



This interesting new species is named for Mr. Gerard Warden Teague in recognition for his excellent work on this group of fishes and also in gratitude for his assistance in identifying the triglids in the University of Florida collection.

*Prionotus xenisma* Jordan and Bollman is apparently quite rare and has been known only from the Gulf of Panama. The Stanford collection was found to contain 12 specimens (S.U. 46308) of this species from Santa Inez Bay, Baja California, Mexico. This represents a notable range extension of some 2700 miles to the north. Also three additional specimens (S.U. 46309) were found that had been taken further to the south in the Gulf of California (Arena Bank near Punta Arena del Sur, Baja California, Mexico).

*Prionotus gymnostethus* Gilbert is also an apparently rare species, having only been taken a short distance west of the tip of Baja California ( $23^{\circ}33'00''$  N.,  $110^{\circ}37'00''$  W.). It was therefore interesting to find among the Stanford material specimens from two localities within the Gulf of California, one individual (S.U. 46310) from Ceralbo Channel ( $24^{\circ}09'$  N.,  $109^{\circ}57'$  W.) and two (S.U. 46313) from the Arena Bank, Baja California.

#### LITERATURE CITED

CALDWELL, DAVID K., and JOHN C. BRIGGS

1956. Range extensions of Western Atlantic fishes with notes on the naked soles of the genus *Gymnachirus*. *In press*: Bull. Florida State Mus., Biol. Sci.

GINSBURG, ISAAC

1950. Review of the Western Atlantic Triglidae (fishes). *Texas Jour. Sci.*, No. 4, pp. 489-527.

TEAGUE, GERARD W.

1951. The sea-robins of America. A revision of the triglid fishes of the genus *Prionotus*. *Comun. Zool. Mus. Hist. Nat. Montevideo*. Vol. 3, No. 61, pp. 1-53, 1 fig., 5 pls.